

IN THE CLAIMS:

1. (Currently Amended) A ~~non-Cu-based~~ cast Al alloy that contains substantially no Cu and consists essentially of 6.5 to 7.5 % Si by mass, 0.36% or less Mg by mass, and 20 to 70 ppm of Sr, wherein the tensile strength thereof is ~~305~~ 295 MPa or more, the 0.2% yield strength thereof is 220 MPa or more, and the elongation thereof is 10% or more.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The ~~non-Cu-based~~ cast Al alloy according to claim 1, wherein said ~~non-Cu-based~~ cast Al alloy is a precipitation hardened alloy.

5. (Currently Amended) The ~~non-Cu-based~~ cast Al alloy according to claim 1, wherein said ~~non-Cu-based~~ cast Al alloy is used for vehicle wheels.

6. (Withdrawn) A method for heat treatment of a cast Al alloy comprising;

subjecting a work piece of the cast Al alloy to solution treatment, and then

subjecting the work piece to aging treatment, to improve mechanical properties of the work piece,

wherein at least said solution treatment is performed by rapidly raising the temperature to the solution treatment temperature within 30 minutes, and maintaining said solution treatment temperature within 3 hours to form the non-Cu-based cast Al alloy that has a tensile strength of 305 MPa or more, a 0.2% yield strength of 220 MPa or more, and an elongation of 10% or more.

7. (Withdrawn) A method for heat treatment of a cast Al alloy comprising;

subjecting a work piece of the cast Al alloy to solution treatment, and then

subjecting the work piece to aging treatment, to improve mechanical properties of the work piece,

wherein at least said solution treatment is performed by allowing said work piece to be present in a fluidized bed to

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form the non-Cu-based cast Al alloy that has a tensile strength of 305 MPa or more, a 0.2% yield strength of 220 MPa or more, and an elongation of 10% or more.

8. (Withdrawn) The method of heat treatment according to claim 7, wherein said aging treatment is performed by allowing said work piece to be present in a fluidized bed.

9. (Withdrawn) The method of heat treatment according to claim 7, wherein said fluidized bed is formed by the direct blowing of hot air.

10. (New) The cast Al alloy according to claim 1, wherein the tensile strength is 305 MPa or more, the 0.2% yield strength thereof is 240 MPa or more, and the elongation thereof is 12% or more.

11. (New) The cast Al alloy according to claim 1, wherein the tensile strength is 320 MPa or more, the 0.2% yield strength thereof is 260 MPa or more, and the elongation thereof is 14% or more.